Amendments to the Specification:

Please replace paragraph [0002] with the following amended paragraph:

[0002] A computer network typically comprises a plurality of interconnected devices. These devices may include any network device, such as a server or end station, that transmits or receives data frames. A common type of computer network is a local area network ("LAN") which typically refers to a privately owned network within a single building or campus. LANs may employ a data communication protocol, such as Ethernet or token ring, that defines the functions performed by the data link and physical layers of a communications architecture in the LAN. In many instances, several LANs are interconnected by point-to-point links, microwave transceivers, satellite hookups, etc. to form a wide area network ("WAN"), that may span an entire country or continent.

Please replace paragraph [0003] with the following amended paragraph:

[0003] One or more intermediate network devices are often used to couple LANs together and allow the corresponding entities to exchange information. For example, a bridge may be used to provide a bridging function between two or more LANs. Alternatively, a switch may be utilized to provide a switching function for transferring information among a plurality of LANs or end stations. In effect, a switch is a bridge among more than two networks or entities. The terms "bridge" and "switch" will be used interchangeably throughout this description. Bridges and switches are typically devices that operate at the Data Link layer ("layer 2") of the Open Systems Interconnection ("OSI") model. Their operation is defined in the American National Standards Institute ("ANSI") Institute of Electrical and Electronics Engineers ("IEEE") 802.1D standard. A copy of the ANSI/IEEE Standard 802.1D, 1998 Edition, is incorporated by reference ~~referenced~~ herein in its entirety.

Please replace paragraph [0005] with the following amended paragraph:

[0005] Networks may be designed using a plurality of distinct topologies – that is, the entities in the network may be coupled together in many different ways. Referring to Figs. 1-3, there are ~~is~~ shown different examples of "ring" topologies. A ring topology is a network configuration formed when "Layer 2" bridges are placed in a circular fashion, with each bridge having two and only two ports belonging to a specific ring. Fig. 1 shows a single ring 150 having bridges 152 connected by paths 154. Each bridge 152 in ring 150 in Fig. 1 has two ports 152a and 152b belonging to the ring. Fig. 2 shows two adjacent rings, 150a and 150b, with a single bridge 156 having two ports 156a, 156b belonging to each ring.

Please replace paragraph [0016] with the following amended paragraph:

[0016] Other available loop avoidance protocols include that shown and described in now pending NETWORK CONFIGURATION PROTOCOL AND METHOD FOR RAPID TRAFFIC RECOVERY AND LOOP AVOIDANCE IN RING TOPOLOGIES, filed March 4, 2002, serial number 10/090,669, now U.S. Patent No. 6,717,922, issued April 6, 2004, and now pending SYSTEM AND METHOD FOR PROVIDING NETWORK ROUTE REDUNDANCY ACROSS LAYER 2 DEVICES, filed April 16, 2002, serial number 10/124,449. The entirety of these applications is ~~are~~ hereby incorporated by reference.

Please replace paragraph [0018] with the following amended paragraph:

[0018] To illustrate this problem, referring to Fig. 5, there is shown a network 180 comprising a core or higher priority network such as a provider 170 coupled to a customer or lower priority network 172 with a lower priority through a switch 174. Core network 170 runs a conventional spanning tree protocol to avoid loops and has defined a blocked path 176. This means that either

port 178 or port 180 is blocked. Many different causes may result in involuntary loops which may collapse the entire network 180 including: STP corrupted BPDUs, unidirectional optical fibers which result, for example, when paths which typically comprise two <u>optical</u> fibers <u>have</u> <u>one optical fiber</u> ~~but one has~~ shut down, and non-configured protocols in loop topologies. In the example in Fig. 5, someone in customer network 172 has improperly disabled the STP running in network 172 or, the STP has become disabled due to problems just mentioned. As a consequence, even though core network 170 is properly running the STP to avoid loops, since the customer in network 172 is not running the STP, a loop is created in customer network 172 and packets from customer network 172 flood core network 170. As core network 170 and customer network 172 share the same data domain, core network 170 will be flooded with customer packets and will be affected adversely by the customer's action. Yet, it is not possible to ensure that all network administrators or devices are properly doing their respective jobs and running respective STPs. Provider networks may form the core network for entire countries or even continents. These provider networks should not be affected by fluctuations in customer networks.

Please replace paragraph [0019] with the following amended paragraph:

[0019] <u>In the application</u> ~~In, now pending,~~ NETWORK CONFIGURATION PROTOCOL AND METHOD FOR RAPID TRAFFIC RECOVERY AND LOOP AVOIDANCE IN RING TOPOLOGIES~~,~~ (referenced above)<u>,</u> a network configuration protocol allows for de-coupling of customer networks and provider networks running distinct instances of a STP. In brief, in a large ring network comprising first and second rings connected through the shared use of a bridge, the first and second rings are assigned a lower relative priority, e.g. a customer, and a higher relative priority, e.g. a provider. Control packets for the lower priority ring are sent through the entire

large ring. Control packets for the higher priority ring are sent only through the higher priority

ring. In the event that the shared bridge fails, the lower priority ring maintains its status as its

control packets continue to circulate the large ring. The higher priority ring detects the failure

and adjusts ports accordingly.

Please replace paragraph [0021] with the following amended paragraph:

[0021] A method for resolving this issue is shown in U.S. Patent Application application Serial

Number 10/456,756, XX/XXX,XXX, entitled "System and Method for Multiple Spanning Tree

Protocol Domains in a Virtual Local Area Network" by Rajiv Ramanathan and Jordi Moncada-

Elias filed June 9, 2003 with attorney docket number 1988.0140000, the entirety of which is

hereby incorporated by reference. In that application, multiple loop detection protocols are

provided for each VLAN. This prevents "layer 2" loops by running a customer side spanning

tree protocol from a provider network.

Please replace paragraph [0026] with the following amended paragraph:

[0026] In accordance with yet another aspect of the invention, is a first network runs running a

loop avoidance protocol wherein the root bridge for the first network is disposed in a second

network running a distinct loop avoidance protocol instance.

Please replace paragraph [0027] with the following amended paragraph:

[0027] In accordance with still yet another aspect of the invention, is a system comprises

comprising a first network including a plurality of switches. A second network also includes a

plurality of switches. The first and second network are connected by at least a shared switch, the

shared switch including a plurality of switches. The first and second network are connected by at

least a shared switch, the shared switch including a plurality of ports including a second network port connected to the second network. The first network runs a first loop avoidance protocol instance. The second network does not run the first loop avoidance protocol instance. One of the bridges in the second network controls the state of the second network port.

Please replace paragraph [0032] with the following amended paragraph:

[0032] Fig. 8 is a diagram showing the contents of a standard IEEE BPDU and a T-BPDU in accordance with the invention and an A-BPDU in accordance with one embodiment of the invention.

Please replace paragraph [0038] with the following amended paragraph:

[0038] Referring now to Fig. 6, there is shown a network 50 operating in accordance with the embodiments of the invention. Network 50 is comprised of a core or provider network 52 communicably coupled to a customer network 54 and a customer network 55. Although provider network 52 is shown directly coupled to customer network 54 50, clearly networks 52, 54 may be indirectly coupled through other intervening networks.

Please replace paragraph [0046] with the following amended paragraph:

[0046] Referring now also to Fig. 8, there are shown is show the different formats for a standard IEEE BPDU 80, a T-BPDU 82, and an A-BPDU 84. Standard BPDU 80 follows the IEEE 802.1D standard and is used between customer switches in customer network 54 and provider switches in provider network 52. BPDU 80 is also used between provider switches in provider network 52 and other provider switches in provider network 52.

Please replace paragraph [0051] with the following amended paragraph:

[0051] The following explains the operation of the respective switches in provider network 52 when each type of switch receives a BPDU. Switch 56 is the DCB and switches 58 and 60 are non-DCBs. Customer ports are the ports in bridges of provider network 52 that receive information from customer network 54 (e.g. ports 58c and 60c).

Please replace paragraph [0064] with the following amended paragraph:

[0064] The actions of each provider switch 56, 58, 60 which receive any BPDU throughout all of network 50 is summarized in Figs. 9-12. Referring to Fig. 9, at step S100, a BPDU is received. At step S102, a query is made as to whether the received BPDU is a standard IEEE BPDU or standard protocol packet. If the answer is yes, control branches to step S2 (Fig. 10). If the answer is no, the software branches to step S104 and queries whether the received BPDU is a T-BPDU. If the answer is yes, control branches to step S20 (Fig. 11). If the answer is no, the software branches to step S108 and queries whether the received BPDU is an A-BPDU. If the answer is yes, control branches to step S40 (Fig. 12). If the answer is no, the packet is dropped at step S110 (Fig. 9).